

National Environmental Public Health Tracking Network

Women's Health and the Environment:

A Tool Kit

This toolkit provides messages related to the National Tracking Network. We strongly encourage you to use tool kit components as guides, substituting your own local and regional level messaging and data whenever possible.

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Goals and Guiding Principles

In today's world, we are exposed to 35,000 messages a day. From TV ads to news stories, and tweets to Web sites, there's a fierce competition for our attention—and our response. As public health professionals, you have a uniquely valuable message to communicate, that often pertains to keeping people healthy and saving lives.

Whether communicating with citizens, other public health professionals, or policymakers, the following steps can help your organization cut through the clutter and be heard:

Know your audience

Different audiences require different messages and methods of delivery. Identify your audience, understand what's important to them, and identify what barriers may keep them from action. Then say what you need to say in a way that connects your ideas to that specific audience's needs or wants.



2.

Say it simply

Use plain language, explain technical terms, and be brief. Regardless of profession or background, we all appreciate straightforward, efficient explanations.



3.

Say it often

Advertising studies suggest that a person needs to be exposed to a message three to five times to receive the full effect of the message. Choose the mediums, such as social media, websites, interviews, and articles, that your audience uses to communicate, and reinforce your messages often.



4.

Touch the heart

Tell stories that people connect with on an emotional level and underscore that story with data that show the larger perspective. Use personal or local stories to illustrate the big picture.





Goals and Guiding Principles



This tool kit was developed as a resource for your organizaton, with messages that are intended to resonate with either certain demographics or your audiences overall.

This toolkit can be used to help meet the communication goals set by CDC's Environmental Public Health Tracking Network (Tracking Network).

Tracking Network Communication Goals

- Educate about the existence of the Tracking Network and how it can be used to show the connections between health and the environment.
- Demonstrate the effect that Tracking Network findings can have on specific environmental public health issues (for example, heart health and exposure to air pollution).
- Encourage partners, stakeholders, and other organizations to access information from and participate in the Tracking Network and help them recognize it as a valuable tool and good investment.

Audiences

This tool kit was developed as a resource for your organization, with messages that are intended to resonate with either certain demographics or your audiences overall. These audiences include:

- State and local public and environmental health practitioners: This group will benefit
 from general awareness of the Tracking Network and exposure to success stories and
 specific examples of how data are being used. Encourage them to not only use existing
 and new Tracking Network services but also advocate use of the program among peer
 groups.
- Decision makers: This group could include city, county, or state health department leadership or elected officials. These are people who might need information for making resource decisions and potential legislative or policy-making opportunities. They are a critical audience for the Tracking Program. Try to provide them with an overall understanding of the functions of the Tracking Network and examples of practical applications of its data. These examples can show how the Tracking Network has proven valuable to cities, states and regions.
- Interested public: This group will likely include persons who look to your organization for health or environment-specific information and discover the Tracking Network via that search. They will benefit most from exposure to specific articles and health-specific information that show the connection between a particular health condition and the environment. Because traditional media channels such as television, radio, and newspapers are important information resources for this group, they will benefit from your organization's active engagement with, and response to, media coverage that relates to health and the environment.



How to Use Tool Kit Components

Decade of Tracking This piece is a straightforward story of the Tracking Network. It uses the simple structure of "Before and After Tracking" to explain the effect the Tracking Network has had.

Ideas for use: Use this item as an introductory piece that tells the story of tracking. Include it as a link, borrow from it when developing presentations, and use it when informing colleagues about available resources, interviews, and materials.

Timeline: This piece serves as a visual demonstration of how the Tracking Network (and its parent, the Tracking Program) began and has evolved.

Ideas for use: Use when creating briefings, as background for presentations, and as a resource for interviews and material development.

Key Messages and Talking Points: The key messages and talking points have been written to support you and your spokespeople as you address the critical role the Tracking Network has played in addressing environmental and public health issues. These messages may be used as is or can be customized and incorporated into your own messaging. We encourage you to use local-, regional-, or state-specific data whenever possible; using these data will further underscore the importance of this resource for your constituents.

Ideas for use: Incorporate these messages into talking points for presentations, speeches, media interviews, and copy for materials.

The Facts: These fact sheets were developed to provide you with health- and environment-specific information that can be used to coincide with awareness events and more. For example, the Women's Health and Cancer fact sheet contains information that relates to various cancers affecting women and would be well-timed for October's Breast Cancer Awareness Month to tie in the connection between breast cancer and the environment.

Ideas for use: Incorporate these facts into your outreach via speeches, emails, Web site content, material development, and social media channels. Provide the fact sheets as a resource to news media. Include interesting data as part of your organization e-mail signature during awareness events. Also, provide the fact sheets to your partners as a resource to distribute.

Matte Article: A series of articles have been developed as stand-alone pieces that



highlight the connection between a health topic and the environment. Its messaging reach is designed to be broad and valuable for everyone from general consumers looking for information about a particular disease to health professionals who want to raise awareness among patients.

Ideas for use: Submit this piece to community papers, provide it to organizations to publish in their newsletters, post it on your Web site, include a link to it on your Facebook wall, and share it via tweets. Distribute or make it available electronically to local schools, medical centers, nursing homes, and health care professionals. Provide this piece to decision makers and use local data when possible – it will inform them about the environment-health connection and how that can affect their constituents; they can also use it on their Web sites. You can also include it in newsletters and incorporate into your organization's mailings.

Social Media Examples: This document contains example topics and sample copy for use on social media channels such as Facebook and Twitter. These posts/tweets were written with the goal of helping your organization engage in a dialogue with your many and varied audiences. Specific examples are provided that can be used to help communicate the value of the Tracking Network to health departments, health practitioners, decision makers and other interested organizations and individual persons.

Ideas for use: Use posts on Facebook and tweets on Twitter. Share with partners who have social media outlets.

Effective Communication: A Crucial Investment

As grantees and partners of the National Environmental Public Health Tracking Network, your organization is an important voice that helps communicate the value of the Tracking Network, and ensures that it can grow and evolve to provide even better service into the future. By incorporating this message at every opportunity into your documents, policy briefings, community outreach, social networks, and media outreach, you serve as an influential resource that can provide critical information and translate the value of the Tracking Network to your different audiences. Together, we can educate people about the connection between health and the environment, encourage Tracking Network use, and help potential partners and champions recognize this tool as a crucial investment that saves lives, protects people and saves money through prevention.



Environmental Public Health Before and After Tracking:

A Decade of Tracking



"When the Pew
Commission report
came out, everyone —
the press, the public,
Congress — couldn't
believe that a tracking
program didn't already
exist."

Shelly Hearne, Dr. P.H. Founding Executive Director, Trust for America's Health (2000)

"CDC's National Environmental Public Health Tracking Network is the most important accomplishment of the past decade."

Thomas A. Burke, Ph.D., M.P.H.
Associate Dean for Public Health
Practice and Training
Professor, Department of Health
Policy and Management
Johns Hopkins Bloomberg
School of Public Health (2010)



After a decade of tracking via a national environmental public health tracking program, our understanding of the connections between public health and the environment is vastly improved. CDC's Environmental Public Health Tracking Program began 10 years ago with the idea that health and environmental problems are not always separate issues with unrelated solutions.

Though the program began in 2002, the actual online Environmental Public Health Tracking Network launched in 2009. This website is a valuable tool that is helping draw a clear picture of the intricate relationships between environment and health. And, as we move forward, the Tracking Network has the potential to empower more and more organizations to save lives and protect health.

Before tracking, even simple questions about health and the environment could take months to answer.

With a tracking network in place, public health officials can respond quickly, often within hours, to locate hazard sources or answer citizens' concerns.

Before tracking, collections of data were created and held by many different government departments within their separate department "silos."

With tracking, standards and tools to link these disparate sources of information now exist and can help answer important questions about the public's health.

Before tracking, environmental and health fields were often separated both physically and philosophically.

With tracking, these two worlds are brought together to benefit of all.

Before tracking, public health and environmental officials concentrated mainly on acute events such as hazardous chemical releases or point-source pollution, such as air pollution from a specific factory.

With tracking in place, officials can trace amounts and geographic spread of pollutants over time. This capability allows the officials to monitor long-term trends and place those acute events in context.

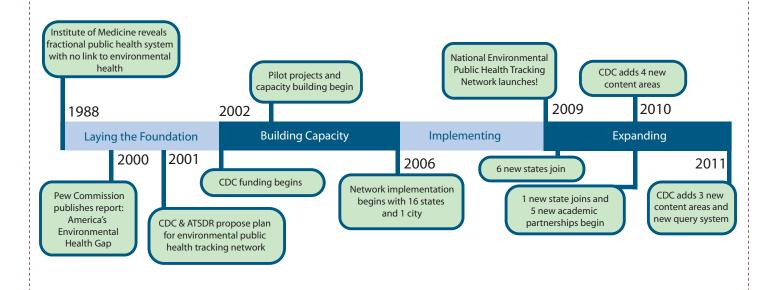
Before tracking, environmental health surveillance was more difficult than infectious disease surveillance, a traditional area of concern for CDC and state and local health departments.

With tracking, we can apply the same "disease detective" skills to finding environmental causes of illnesses and then take preventive measures to protect the public's health. ■



Environmental Public Health Tracking Network:

A Timeline





Women's Health and the Environment:

Key Messages and Talking Points



The following key messages and talking points can help you and your spokespeople convey and emphasize the effect the Tracking Network can have.

How to Use

The following key messages and talking points can help you and your spokespeople convey and emphasize the effect the Tracking Network can have on addressing the connections between women's health and the environment. These messages and talking points may be used as they have been written, or, they can be customized for your own purposes. We encourage you to use local-, regional-, or state-specific information whenever possible because it will further underscore the importance of this resource for your constituents. Each of the three key messages presented are supported by several additional talking points.

Key Messages

- The National Environmental Public Health Tracking Network is the best Internet source that connects environmental and health information. This source can give (INSERT YOUR ORGANIZATION NAME) the power to help save lives and better protect the people we serve.
 - The Tracking Network is unique because it brings together data that would usually be collected and kept by many separate agencies and then standardizes it. This process allows us to see how our health and the environment are related.
 - The Tracking Network also offers tools to help make sense of these data—such as maps that show where environmental and health problems are happening—and then makes that valuable information available to people who need it, from scientists to decision-makers.
 - The Tracking Network is used by states, cities, universities, and professional organizations to help make critical decisions about where to target environmental public health resources that will protect people and save lives.
- The Tracking Network is helping us understand more about the relationship between women's health and the environment, specifically reproductive health, cancer, and heart attacks.
 - Exposure to environmental pollutants, chemicals, and industrial products can affect a
 woman's health negatively—from decreasing her ability to carry a baby to full term to
 increasing her risk for cancer and heart attacks.
 - Air pollution, lead, and some solvents have been linked to increases in risk of prematurity or preterm delivery.
 - Short- and long-term exposure to particulate air pollution have been tied to heart attacks and other forms of coronary heart disease.
 - Certain environmental factors may increase the risk for particular cancers, such as external ionizing radiation and thyroid cancer or asbestos and lung cancer.



Women's Health and the Environment:

Key Messages and Talking Points

- Tracking can improve surveillance methods by creating indicators that can be linked to environmental exposure or hazard data; something that existing sytems are not doing. The Tracking Network has data on a variety of environmental factors that can impact a woman's health:
 - The Tracking Network has data on women's health issues that can be affected by environmental factors:
 - Reproductive health: fertility rate, infant mortality, low birthweight among single births, prematurity among single births, and sex ratio
 - Cancer: incidences of acute myeloid leukemia, bladder cancer, brain and other nervous system cancer, breast cancer, chronic lymphocytic leukemia, kidney cancer, leukemia, liver cancer, lung and bronchus cancers, melanoma, mesothelioma, Non-Hodgkin's Lymphoma, and thyroid cancers
 - Heart attacks: hospitalizations for heart attacks
- This information can help public health officials plan how and where to best target prevention efforts and protective policies. For example, we can identify where to increase community outreach about the dangers of exposure to air pollution and drinking water contaminated with lead, which are environmental risk factors for low birthweight babies.
 - (INSERT ORGANIZATION) was able to put (INSERT ACTION, SAFEGUARD, ETC.) in place to help improve women's health by improving birth outcomes and reducing incidences of heart attacks and cancers, which will help (INSERT LOCAL /STATE NUMBERS) of women in (INSERT CITY/STATE). he Tracking Network has data on women's health issues that can be affected by environmental factors:
- The Tracking Network boosts (INSERT ORGANIZATION) ability to save lives and protect the health of people we serve.
 - o The Tracking Network fills information gaps.
 - The Tracking Network helps us respond quickly to environmental public health issues.
 - o Please help others use this important and valuable resource. Everyone who is looking for information about a health and environmental connection should and can use the Tracking Network at www.cdc.gov/ephtracking. ■



About one woman out of every 10 has difficulty getting or stay pregnant.

THE FACTS ABOUT REPRODUCTIVE AND BIRTH OUTCOMES

About 6 million pregnancies occur each year in the United States. Although most women have a normal term pregnancy and deliver a normal infant, not all women experience a safe and healthy pregnancy. Each year, more than a half million babies in the United States—1 of 8—are born prematurely.¹

Some babies are so small they could fit in the palm of a hand. In the United States, about 1 of every 10 women (6.1 million) ages 15–44 years has difficulty getting pregnant or staying pregnant. For many people who want to start a family, the dream of having a child is not easily realized.

The National Environmental Public Health Tracking Network is helping us understand the connection between reproductive and birth outcomes and the environment. The Tracking Program can improve surveillance methods by creating indicators that can be linked to environmental exposure/hazard data that existing surveillance systems are not collecting.

For example, in California, stakeholders used the California Tracking Program's traffic tool to identify and prevent potentially harmful environmental risks in city planning. Alameda County officials used special analytic and mapping techniques to locate areas in the county with high rates of preterm birth, high rates of full term births with low birth weights, and a range of asthma indicators. By exploring possible relationships between these outcomes and environmental hazards, they provided technical assistance to promote equity and empowerment for low-income neighborhoods and communities of color in Alameda County.³

PREMATURE BIRTHS

About Premature Births

- A premature birth is one that occurs at least three weeks before a baby's due date. It is also known as preterm birth. A full term pregnancy is 40 weeks.⁴
- Important growth and development occur throughout pregnancy—all the way through the final months and weeks. Although most babies born a few weeks early do well with no health issues, some do have more health problems than full-term babies. For example, a baby born at 35 weeks is more likely to have jaundice, breathing problems, and longer hospital stays.⁵
- Babies who survive a premature birth may face lifelong problems such as intellectual disabilities, cerebral palsy, breathing and respiratory problems, vision and hearing loss, and feeding and digestive problems.⁶

- 1 http://www.cdc.gov/Features/Premature-Birth/
- 2 http://www.cdc.gov/reproductivehealth/ Infertility/index.htm
- 3 http://www.cdc.gov/nceh/tracking/success/ california.htm#community
- 4 http://www.cdc.gov/Features/Premature-Birth/
- 5 http://www.cdc.gov/Features/Premature-Birth/
- 6 http://www.cdc.gov/Features/Premature

- Even if a woman does everything "right" during pregnancy, she still can have a premature baby. Known risk factors for premature birth include⁷:
 - o Carrying more than one baby (twins, triplets, quadruplets, or more)
 - o Having a previous preterm birth
 - o Problems with the uterus or cervix
 - Chronic health problems in the mother, such as high blood pressure, diabetes, and clotting disorders
 - o Certain infections during pregnancy
 - o Cigarette smoking, alcohol use, or illicit drug use during pregnancy
- Other potential risk factors are8:
 - o Mother's age, race, poverty: women who are African-American, women younger than 17 years and older than 35 years, and poor women are at greater risk than other women
 - o Male babies, associated with single preterm births
 - o Certain lifestyles and environmental factors, including:
 - Late or no prenatal care
 - Social and economic factors (domestic violence, lack of social support, stress, marital status)
 - Long working hours with long periods of standing
 - Being underweight or overweight before pregnancy
 - Spacing of births, less than 6-9 months between birth and the beginning of the next pregnancy
 - Environmental chemicals (for example, exposure to air pollution or drinking water contaminated with lead)
- Preterm birth can happen to anyone and most women who have a premature birth have no known risk factors. There are things that women can do to help their health and lower the risk of having a premature baby such as⁹:
 - o Quit smoking and avoid substances such as alcohol or drugs
 - See your health care provider for a medical checkup before pregnancy
 - o Work with your doctor to control diseases such as high blood pressure or diabetes
 - Get prenatal care early, as soon as you think you may be pregnant, and throughout the pregnancy
 - o Discuss concerns during pregnancy with your doctor, and seek medical attention for any warning signs or symptoms of preterm labor
- 7 http://www.cdc.gov/Features/Premature-Birth/
- 8 http://ephtracking.cdc.gov/showRbPrematureBirthEnvaction
- 9 http://www.cdc.gov/Features/Premature-

Premature Births in the United States

- More than a half million babies in the United States—that's 1 in every 8—are born prematurely each year.¹⁰
- Premature birth is the most frequent cause of infant death, the leading cause of long-term neurological disabilities in children, and a more than \$26 billion cost to the U.S. health care system each year.¹¹
- Following a long period of fairly steady increase, the U.S. preterm birth rate declined for the second straight year in 2008 to 12.3 percent, from 12.8 percent in 2006.
 - o This marks the first 2-year decline in the preterm birth rate in nearly three decades. 12
 - o Preterm birth rates declined from 2006 to 2008 for mothers of all age groups under age 40, for the three largest race and Hispanic origin groups and for most U.S. states.¹³
- Preterm births occur more often among certain racial and ethnic groups. Infants of non-Hispanic black mothers are at greater risk of being born preterm. They are more than 1.5 times more likely to be born preterm compared with infants of non-Hispanic white women.¹⁴
- The percentage of preterm births was down for all types of deliveries from 2006 to 2008, for cesareans and for induced and non-induced vaginal deliveries.¹⁵

The Connection Between Premature Births and the Environment

 Higher risks of preterm delivery have been related to exposures during pregnancy to air pollution, lead, and some solvents¹⁶

What We Are Learning from the Environmental Public Health Tracking Network

- The Tracking Network uses information from many health resources to help understand the
 connection between the environment and premature births. Each state registrar reports
 death and birth data to CDC's National Center for Health Statistics (NCHS), which maintains
 files of all births and deaths in the United States and U.S. territories. The NCHS maintained
 data are generally available about one year later than state-maintained data. These data can
 be found on the Tracking Network.
- The Tracking Network can tell us the average number and percentage of preterm and very preterm births each year, by state, from 2000 through 2007. It can also provide additional demographics such as infant gender, maternal age group, maternal ethnicity, and maternal race.

- 10 http://www.cdc.gov/Features/Premature-Birth/
- 11 http://www.cdc.gov/reproductivehealth/ maternalinfanthealth/PretermBirth.htm
- http://www.cdc.gov/nchs/data/databriefs/ db39.pdf
 http://www.cdc.gov/nchs/data/databriefs/
- db39.pdf 14 http://www.cdc.gov/reproductivehealth/
- 14 http://www.cdc.gov/reproductivehealth/ maternalinfanthealth/PretermBirth.htm
- 15 http://www.cdc.gov/nchs/data/databriefs/ db39.pdf
- 16 http://ephtracking.cdc.gov/showRbPrema-

- In California, a routine review of data on the California Tracking Network revealed a pattern in the risk of preterm birth in Fresno County, one of the major population centers in the state's Central Valley area.¹⁷
 - California's Environmental Health Tracking Network informed the Fresno Department of Public Health of the trend and provided more data about preterm birth trends in the area, including data about preterm birth trends reported by race and ethnicity, maternal Infant Health (MIH) indicators, including very preterm birth (less than 32 weeks gestation), and rates by census tracts.¹⁸
 - o Fresno County used the information to identify locations for targeting activities that are related to childhood lead poisoning, air quality, and asthma. Fresno County officials reported that the data and assistance from the tracking network were very helpful to the local childhood lead poisoning prevention program.¹⁹

¹⁷ http://www.cdc.gov/nceh/tracking/success/california.htm#community

¹⁸ http://www.cdc.gov/nceh/tracking/success/california.htm#community

¹⁹ http://www.cdc.gov/nceh/tracking/success/california.htm#community



INFANT AND PERINATAL MORTALITY

About Infant and Perinatal Mortality

- Perinatal mortality is defined as death after the 28th week of pregnancy, but before the 7th day of age.²⁰
- Unexplained fetal death and death related to growth restriction are the leading causes of fetal death. Fetal death is a significant source of mortality; the rate is many times higher than the rate of sudden infant death syndrome (SIDS) among infants.²¹
- Markers of increased risk for fetal loss include²²:
 - o Pre-pregnancy obesity
 - Lower socioeconomic status
 - o Non-Hispanic black race
 - o Advanced maternal age
 - Exposure to pesticides
- Infant mortality is defined as when an infant dies at less than 1 year of age. 23
- The leading causes of infant death include²⁴:
 - o Congenital abnormalities
 - o Pre-term/low birth weight
 - SIDS
 - o Problems related to complications of pregnancy
 - o Respiratory distress syndrome

Infant and Perinatal Mortality in the United States

- The U.S. infant mortality rate was 6.61 infant deaths per 1,000 live births in 2008, 2 percent lower than the rate of 6.75 in 2007.²⁵
- Racial and ethnic disparities in health have generated increasing attention and concern in the past few years. Research shows that one of the largest disparities found is racial and ethnic differences in infant mortality.²⁶
 - Infant mortality rates ranged from 4.51 per 1,000 live births for Asian or Pacific Islander mothers to 12.67 for non-Hispanic black mothers. The rate for non-Hispanic black women declined 5 percent from 2007 to 2008.²⁷
 - In 2007, the infant mortality rate for non-Hispanic black women was 2.4 times the rate for non-Hispanic white women. American Indian or Alaska Native (AIAN) and Puerto Rican women also had relatively high infant mortality rates.
 - o The higher infant mortality rate for non-Hispanic black and Puerto Rican women,

- 20 http://ephtracking.cdc.gov/showRbInfant-MortalityEnv.action
- 21 http://ephtracking.cdc.gov/showRbInfant-MortalityEnv.action
- 22 http://ephtracking.cdc.gov/showRbInfant-MortalityEnv.action
- 23 http://ephtracking.cdc.gov/showRbInfant-MortalityEnv.action
- 24 http://ephtracking.cdc.gov/showRbInfant-MortalityEnv.action
- 25 http://www.cdc.gov/nchs/data/nvsr/ nvsr60/nvsr60_05.pdf
- 26 http://www.cdc.gov/nchs/data/databriefs/db74.htm
- 27 http://www.cdc.gov/nchs/data/nvsr/ nvsr60/nvsr60_05.pdf



- compared with non-Hispanic white women, was due primarily to their higher levels of preterm births and preterm-related causes of death.
- In contrast, the higher infant mortality rate for AIAN women was mostly due to higher infant mortality rates for term and near-term infants, not to a higher percentage of preterm births.
- o Higher infant mortality rates from sudden infant death syndrome contributed the most to the infant mortality gap between AIAN and non-Hispanic white women.
- Infant mortality was higher for male infants and infants born preterm or at low birth weight. Infant mortality rates were also higher for those infants who were born in multiple deliveries, to mothers who were unmarried, and for those whose mothers were born in the 50 States or the District of Columbia.²⁸

The Connection between Infant and Perinatal Mortality and the Environment

- A fetus or an infant may be particularly susceptible to harmful effects of environmental
 contaminants. Many environmental contaminants may be especially toxic in the womb.
 Many cross the placenta and make their way into the circulatory system of the developing
 fetus. Even if a potentially harmful exposure is identified, the health effects on the fetus
 often are not well understood until years later.²⁹
- Outdoor air pollution is one example of a connection between environmental health and infant death. Air pollution in the form of particulate matter 10 (PM₁₀) has been associated with an increase in the rate of postneonatal deaths. Postneonatal deaths occur from age 28 days through the first year of life. The major causes of death associated with PM₁₀ exposure were deaths from respiratory causes and SIDS.³⁰
- Pesticides have been associated with fetal death and spontaneous fetal losses, but more research is needed to determine the degree of association.³¹

What We are Learning from the Environmental Public Health Tracking Network

- The Tracking Network uses information from many health resources to help understand the connection between the environment and infant/perinatal mortality. Each state registrar reports death and birth data to CDC's National Center for Health Statistics (NCHS), which maintains files of all births and deaths in the United States and U.S. territories. The NCHS-maintained data generally are available about one year later than state-maintained data.
- The Tracking Network can tell us the average number of infant, neonatal, and postnatal deaths over a 5-year period, along with the average infant, neonatal, and postneonatal mortality rate per 1,000 live births over a 5-year period. These data are available from 2000 through 2007. It also can provide additional demographics such as infant gender, maternal age group, maternal ethnicity, and maternal race. 32
- 28 http://www.cdc.gov/nchs/data/nvsr/
- nvsr60/nvsr60_05.pdf 29 http://ephtracking.cdc.gov/showRbInfant-MortalityEnv.action
- 30 http://ephtracking.cdc.gov/showRbInfant-MortalityEnv.action
- 31 http://ephtracking.cdc.gov/showRbInfant-MortalityEnv.action
- National Environmental Public Health Tracking Network Reporting Tool

FERTILITY AND INFERTILITY

About Fertility and Infertility

- Infertility means not being able to get pregnant after one year of trying. Or, six months if a woman is 35 years of age or older. Women who can get pregnant but are unable to stay pregnant may also be infertile.³³
- The following factors increase a woman's risk of infertility³⁴:
 - Age
 - Stress
 - Poor diet
 - o Athletic training
 - o Overweight or underweight
 - Tobacco use
 - Alcohol consumption
 - Sexually transmitted diseases (STDs)
 - Health problems that cause hormonal changes
- Infertility is not only a woman's problem. Both women and men can have problems that cause infertility. Women's problems cause about one-third of infertility cases are caused by women's problems. Another third of fertility problems are due to the man. The other cases are caused by a mixture of male and female problems or by unknown problems.³⁵
- Infertility can be treated with medicine, surgery, artificial insemination, or assisted reproductive technology. Many times these treatments are combined. In most cases infertility is treated with drugs or surgery.³⁶

Fertility and Infertility in the United States

 About 1 woman out of every 10 (6.1 million) in the United States ages 15–44 years have difficulty getting pregnant or staying pregnant.³⁷

The Connection between Fertility, Infertility and the Environment

Approximately 10 percent of problems with fertility are unknown and environmental
contaminants including endocrine disruptors have been hypothesized as major
contributors. Environmental contamination can have multi-generational impacts on
reproduction that need to be studied and tracked long term.³⁸

- 33 http://www.cdc.gov/reproductivehealth/ Infertility/
- 34 http://ephtracking.cdc.gov/showRbFertilityInfertilityEnv.action
- 35 http://www.cdc.gov/reproductivehealth/ Infertility/
- 36 http://www.womenshealth.gov/publications/our-publications/fact-sheet/infertility.cfm
- 37 http://www.cdc.gov/reproductivehealth/ Infertility/
- 38 http://ephtracking.cdc.gov/showRbFertilityInfertilityEnv.action



What We Are Learning from the Environmental Public Health Tracking Network

- The Tracking Network uses information from many health resources to help understand the connection between the environment and fertility/infertility. Several indicators have been used to track fertility globally, nationally, by state, and locally. Indicators most commonly used are the general fertility rate, defined as the number of live births divided by the total number of women of reproductive age (15–44 years), and the total fertility rate. The data come from the U.S. National Center for Health Statistics—Vital Statistics Reports and/or state-specific vital statistics (for more recent years), as well as the U.S. Census Bureau.³⁹
- The Tracking Network can help us understand the geographic distribution and trends in fertility and will provide basic descriptive clues to changes that may be influenced by environmental risk factors. As we learn more about the link between adverse exposures and fertility, these rates will provide important background information about how fertility varies geographically in relation to changes in potentially related environmental risk factors and how it has varied over time within the United States.⁴⁰

39 http://ephtracking.cdc.gov/showIndicator-

⁴⁰ http://ephtracking.cdc.gov/showIndicator Pages.action

Women's Health and the Environment:

The Facts



A woman suffers a heart attack every 90 seconds in the United States.

THE FACTS ABOUT HEART ATTACKS

By 2007, about 7.9 million Americans age 20 and older had survived a heart attack, according to the American Heart Association.⁴¹ A heart attack is also called a myocardial infarction, a medical condition that occurs when the blood supply to a part of the heart is interrupted. The resulting blood or oxygen shortage causes damage and potential death of heart tissue.

Researchers both in the United States and abroad have shown relationships between exposure to short- and long-term exposure to particulate air pollution and the increased risk of heart attacks and other forms of coronary heart disease. The Tracking Network is furthering understanding of the connection between heart attacks and the environment. By tracking heart-attack related hospital admissions, the Tracking Network is helping identify time trends in admissions, seasonal patterns, geographic differences, and differences by population characteristics (gender, age, race/ethnicity) to understand more about how people could benefit from protection from air pollution

About Heart Attacks

- A heart attack occurs if the flow of oxygen-rich blood to a section of heart muscle suddenly becomes blocked. If blood flow isn't restored quickly, the section of heart muscle begins to die 42
- Heart attacks most often occur as a result of coronary heart disease (CHD), also called coronary artery disease. CHD is a condition in which a waxy substance called plaque builds up inside the coronary arteries. These arteries supply oxygen-rich blood to your heart.⁴³
- When plaque builds up in the arteries, the condition is called atherosclerosis. The buildup of plaque occurs over many years. Eventually, an area of plaque can break open inside of an artery. This causes a blood clot to form on the plaque's surface. If the clot becomes large enough, it can block blood flow through a coronary artery mostly or completely.⁴⁴
- If the blockage isn't treated quickly, the portion of heart muscle fed by the artery begins to die. Scar tissue replaces healthy heart tissue. This heart damage may not be obvious, or it may cause severe or long-lasting problems.⁴⁵
- Some heart attacks are sudden and intense, like a "movie heart attack," where no one doubts what's happening. But most heart attacks start slowly, with mild pain or discomfort. Often people aren't sure what's wrong and wait too long before getting help. Here are signs of heart attacks in women⁴⁶:

41 http://ephtracking.cdc.gov/showHeartAttack.action

42 http://www.nhlbi.nih.gov/health/healthtopics/topics/heartattack/

43 http://www.nhlbi.nih.gov/health/healthtopics/topics/heartattack

44 http://www.nhlbi.nih.gov/health/healthtopics/topics/heartattack/

45 http://www.nhlbi.nih.gov/health/healthtopics/topics/heartattack/

46 http://www.heart.org/HEARTORG/Conditions/HeartAttack/WarningSignsofaHeartAttack/Heart-Attack-Symptoms-in-Women_UCM_436448_Article.jsp

- o Uncomfortable pressure, squeezing, fullness or pain in the center of your chest; it lasts more than a few minutes, or goes away and comes back
- o Pain or discomfort in one or both arms, the back, neck, jaw or stomach
- o Shortness of breath with or without chest discomfort
- o Breaking out in a cold sweat, nausea or lightheadedness
- As with men, women's most common heart attack symptom is chest pain or discomfort. But women are somewhat more likely than men to experience some of the other common symptoms, particularly shortness of breath, nausea/vomiting, and back or jaw pain.
- A heart attack can happen to anyone. Learning which of the risk factors apply to you specifically can help you take steps to eliminate or reduce your risks. Following are steps you can take to reduce your risk for a heart attack⁴⁷:
 - o Prevent and control high blood cholesterol
 - Prevent and control high blood pressure
 - Prevent and control diabetes
 - o Do not smoke
 - o If you drink alcohol, do so moderately
 - o Maintain a healthy weight
 - o Do regular physical activity
 - Eat a nutritious diet

Heart Attacks in the United States

- Each year, about 1.2 million people in the United States have heart attacks, and many of them die.⁴⁸
- A woman suffers a heart attack every 90 seconds in the United States.⁴⁹ Heart attacks are a leading killer of both men and women in the United States.⁵⁰
- By 2007, about 7.9 million Americans age 20 and older had survived a heart attack, according to the American Heart Association.⁵¹

The Connection between Heart Attacks and the Environment

• Several factors can be involved in the increased risk for heart attacks. These include health, lifestyle, and environment.

- 47 http://ephtracking.cdc.gov/showHeartPrevention.action
- 48 http://www.nhlbi.nih.gov/health/healthtopics/topics/heartattack/
- 49 http://www.womenshealth.gov/heartattack
- 50 http://www.nhlbi.nih.gov/health/healthtopics/topics/heartattack/
- 51 http://ephtracking.cdc.gov/showHeartAttack.action

- Increases in air pollution have been linked to decreases in lung function and increases in heart attacks. High levels of air pollution directly affect people with asthma and other types of lung or heart disease says the U.S. Environmental Protection Agency (EPA) Air Quality Index. Overall air quality has improved in the last 20 years, but urban areas are still a concern. The elderly and children are especially vulnerable to the effects of air pollution.⁵²
- The level of environmental risk for heart attacks depends on several factors:⁵³
 - o The amount of pollution in the air
 - o A person's exposure to the air pollution
 - o Overall health
- Several studies have reported connections between air pollution and hospital stays for heart attacks and other forms of heart disease. For example, researchers have shown increases in heart attack hospital stay rates in relation to fine particles (PM2.5), particularly in sensitive groups, such as the elderly, patients with pre-existing heart disease, survivors of heart attack, or people with chronic obstructive pulmonary disease (COPD).⁵⁴
- You can take steps to help protect your health from air pollution⁵⁵:
 - o Know your sensitivity to air pollution
 - o Know when air pollution may be bad in your area
 - Plan activities when and where pollution levels are lower, using the Air Quality Index to guide planning
 - o Change your activity level
 - o Listen to your body
 - o Consult your health care provider
 - o Have your medication with you

What We Are Learning from the Environmental Public Health Tracking Network

- The United States does not have a single heart attack surveillance system. And there is no surveillance system for coronary heart disease in general. Death is the primary descriptor in national data for heart attacks. Estimates of incidence and prevalence of heart attacks and coronary heart disease are largely based on survey samples (such as the National Health and Nutrition Examination Survey and National Ambulatory Care Survey) or large cohort studies such as the Atherosclerosis Risk in Communities study.⁵⁶
- 52 http://ephtracking.cdc.gov/showHeartEx-
- 53 http://ephtracking.cdc.gov/showHeartExpRisk.action
- 54 http://ephtracking.cdc.gov/showHeartEnv. action
- 55 http://ephtracking.cdc.gov/showHeartPrevention.action
- 56 http://ephtracking.cdc.gov/showHeartCollectingData.action

- Tracking hospital admissions for heart attacks will help with 57:
 - o Examination of time trends in hospital admissions
 - o Identification of any seasonal patterns
 - o Assessment of geographic differences in hospital admissions
 - Evaluation of differences in heart attack hospital admissions by age, gender, and race/ ethnicity
 - o Determination of populations in need of targeted interventions
- The Tracking Network is using hospital admission dates to count the cases of heart attacks. Other public health programs use the hospital discharge dates to count the cases of heart attacks. This counting variance may cause a difference in heart attack rates between the Tracking Network and other public health websites.⁵⁸

⁵⁷ http://ephtracking.cdc.gov/showHeartCol-

lectingData.action

⁵⁸ http://ephtracking.cdc.gov/showHeartCollectingData.action

Women's Health and the Environment:

The Facts



Breast cancer will develop in approximately one in eight woman during their lifetime.

THE FACTS ABOUT CANCER

Cancer is a group of diseases in which abnormal cells in the body grow out of control. Cancer is not just one disease but many different diseases, with more than 100 different types. Cancer is one of the most common chronic diseases in United States, second only to heart disease as the leading cause of death. Every year, cancer claims the lives of more than a quarter of a million women in America. More women in the United States die from lung cancer than any other type of cancer, and cigarette smoking causes most cases.⁶¹

The Tracking Network is making cancer incidence data easier to access and use. Although cancer incidence data are available on several websites, integrating the information with other health outcome data or environmental data is difficult. The Tracking Network can add to existing public health surveillance of cancer by examining potential ecological relationships with environmental exposures.⁶²

In New York, residents have asked for maps showing new cancer cases in their neighborhoods. The state has struggled with how to respond to this request, which requires sharing detailed data while protecting patient identity. New York State's Tracking Program worked with partners to develop the Environmental Facilities and Cancer Mapping application that contains maps that show the number of cancer cases and locations of environmental facilities at the census block level. With these tools, health departments can respond more quickly and easily to information requests. The public can also use this information to understand more about cancer in their neighborhoods.⁶³

BREAST CANCER

About Breast Cancer

- Breast cancer is the most commonly diagnosed cancer in women in the United States. The incidence of this disease is decreasing, primarily among women older than 50 years. The disease usually occurs in women but men can have breast cancer too.⁶⁴
- The exact causes of breast cancer are unknown. However, women in certain categories are at increased risk for breast cancer. Known risk factors include⁶⁵:
 - Older age
 - White ethnicity
 - Obesity (after menopause)
 - o Dense breast tissue (after menopause)
 - High estrogen levels
 - Unusually tall

- 59 http://ephtracking.cdc.gov/showCancer-Main.action
- 60 http://www.cdc.gov/Features/womenandcancer/
- 61 http://www.cdc.gov/Features/womenand-cancer/62 http://ephtracking.cdc.gov/showCancer-
- Main.action

 63 http://www.cdc.gov/nceh/tracking/succes
- 63 http://www.cdc.gov/nceh/tracking/success/ newyork.htm#neighborhood64 http://ephtracking.cdc.gov/showCancerB-
- cEnv.action
 65 http://ephtracking.cdc.gov/showCancerBcEnv.action

- o Early onset of menstruation
- Later age pregnancy
- o Having no or few children
- Late onset of menopause
- o Family history of breast cancer
- o Certain genetic mutations
- o Certain types of benign breast disease
- o History of breast cancer
- o Post-menopausal hormone use
- o Heavy alcohol consumption
- o Cigarette smoking
- Exposure to secondhand cigarette smoke
- Current or recent use of birth control pills
- Low levels of physical activity
- o Never breast feeding or short duration of breast feeding
- Most women who develop breast cancer have no risk factors. Breast self-exams and breast
 exams and mammograms done by healthcare professionals increase the chances that
 breast cancer will be diagnosed early. Among women who have higher than average risk,
 certain drugs may help prevent breast cancer. All women should discuss their risk and
 screening or prevention options with their doctor.⁶⁶
- There are different kinds of breast cancer. The kind of breast cancer depends on which cells in the breast turn into cancer. Breast cancer can begin in different parts of the breast, like the ducts or the lobes. Common kinds of breast cancer are⁶⁷:
 - o Ductal carcinoma: this is the most common kind of breast cancer. It begins in the cells that line the milk ducts in the breast, also called the lining of the breast ducts.
 - o Lobular carcinoma: in this kind of breast cancer, the cancer cells begin in the lobes, or lobules, of the breast. Lobules are the glands that make milk.
- Breast cancer screening is done to check a woman's breasts for cancer before there are signs or symptoms of the disease. Three main tests are used to screen the breasts for cancer. Talk to your doctor about which tests are right for you and when you should have them.⁶⁸
 - o Mammogram: a mammogram is an X-ray of the breast. Mammograms are the best method to detect breast cancer early. When breast cancer is found early it is easier to treat. Mammograms can help find breast cancer before it is big enough to feel

66 http://ephtracking.cdc.gov/showCancerBcEnv.action

67 http://www.cdc.gov/cancer/breast/basic_info/

68 http://www.cdc.gov/cancer/breast/basic_info/screening.htm

or cause symptoms. Having regular mammograms can lower the risk of dying from breast cancer. If you are age 50 to 74 years, be sure to have a screening mammogram every two years. If you are age 40–49 years, talk to your doctor about when and how often you should have a screening mammogram.

- o Clinical breast exam: a clinical breast exam is an exam by a doctor or nurse, who uses his or her hands to feel for lumps or other changes.
- Breast self-exam: a breast self-exam is when you check your own breasts for lumps, changes in size or shape of the breast, or any other changes in the breasts or underarm (armpit).

Breast Cancer in the United States

- In the United States in 2008 (the most recent year data is available), 210,203 women were diagnosed with breast cancer, and 40,589 women died from the disease. Except for skin cancer, breast cancer is the most common cancer among American women.⁶⁹
- Breast cancer will develop in approximately one in eight women during their lifetimes.⁷⁰
- Not counting some kinds of skin cancer, breast cancer in the United States is:⁷¹
 - o The most common cancer in women, no matter your race or ethnicity
 - o The most common cause of death from cancer among Hispanic women
 - The second most common cause of death from cancer among white, black, Asian/Pacific Islander, and American Indian/Alaska Native women

The Connection Between Breast Cancer and the Environment

- Only about 47 percent of breast cancers that occur in the United States can be attributed
 to known risk factors. Although animal studies indicate that environmental contaminants
 can cause breast tumors, clear links between environmental exposures (other than ionizing
 radiation) and human breast cancer have not been proven.⁷²
- Exposure to chemicals such as poly aromatic hydrocarbons, benzene, and organic solvents and passive smoking has been suspected in causing breast cancer, but the evidence is weak and more research is needed.⁷³
- Pesticides and industrial products concern researchers because of their presence in the
 environment, ability to be absorbed by fat, and potential to act as endocrine disruptors.
 An endocrine disruptor is a synthetic chemical that, when absorbed into the body, either
 mimics or blocks hormones and disrupts the body's normal functions. Overall, scientific
 studies do not support an association between these chemicals and breast cancer.⁷⁴

http://www.cdc.gov/cancer/breast http://ephtracking.cdc.gov/showCancerB-

70 http://ephtracking.cdc.gov/showCancerE cEnv.action

http://www.cdc.gov/cancer/breast/basic_info/fast_facts.htm
 http://ephtracking.cdc.gov/showCancerB

cEnv.action
73 http://ephtracking.cdc.gov/showCancerB-

74 http://ephtracking.cdc.gov/showCancerB cEnv.action



What We Are Learning from the Environmental Public Health Tracking Network

- The Tracking Network is making cancer incidence data easier to access and use. Although cancer incidence data are available on several websites, integrating the information with other health outcome data or environmental data is difficult. The Tracking Network can add to existing public health surveillance of cancer by examining potential ecological relationships with environmental exposures.⁷⁵
- The Tracking Network can tell us the average number of breast cancer cases and the ageadjusted rate for a specific year and a 5-year time period. These data are available from 2000 to 2008. It can also provide information by additional demographics such as age range (over 50 years and under 50 years) and ethnicity.⁷⁶ ■

⁷⁵ http://ephtracking.cdc.gov/showCancer-CollectingData.action

⁷⁶ http://ephtracking.cdc.gov/QueryPanel/ EPHTNQuery/EPHTQuery.html?c=CR&i=-1&m=-1



KIDNEY CANCER

About Kidney Cancer

- Kidney cancer is a cancer that forms in tissues of the kidneys. Some types of kidney cancer include⁷⁷:
 - o Renal cell carcinoma: cancer that forms in the lining of very small tubes in the kidney that remove waste from blood
 - o Renal pelvis carcinoma: cancer that forms in the center of the kidney where urine collects
 - Wilms tumor: a type of kidney cancer that usually develops in children under the age of
- People with the following risk factors may be more likely than others to develop kidney cancer⁷⁸:
 - o Smoking
 - Exposure to certain hazardous substances, such as arsenic, asbestos, cadmium, some herbicides, benzene, and trichloroethylene (TCE)
 - o Obesity
 - High blood pressure
 - o Family history of kidney cancer

Kidney Cancer in the United States

- Kidney cancer is among the 10 most common cancers in both men and women.⁷⁹
- Overall, the lifetime risk for developing kidney cancer is about 1 in 67 (1.49 percent). This risk is higher in men than in women.⁸⁰
- The American Cancer Society's most recent estimates for kidney cancer in the United States are for 2012⁸¹:
 - About 64,770 new cases of kidney cancer (40,250 in men and 24,520 in women) will occur.
 - o About 13,570 people (8,650 men and 4,920 women) will die from this disease.
- In the "Annual Report to the Nation on the Status of Cancer, 1975–2008," researchers from CDC, the North American Association of Central Cancer Registries, the National Cancer Institute, and the American Cancer Society found continued declines in many cancer rates; kidney cancer, however, was one of the cancers on the rise.
- Most people with this cancer are older. The average age of people when they are diagnosed is 64. Kidney cancer is very uncommon in people younger than age 45, and it most often occurs in people 55 and older.⁸³

- 77 http://ephtracking.cdc.gov/showCancerKidneyRenalEnv.action
- 78 http://ephtracking.cdc.gov/showCancerKidnevRenalEnv.action
- 79 http://ephtracking.cdc.gov/showCancerKidneyRenalEnv.action
- 80 http://www.cancer.org/Cancer/KidneyCancer/DetailedGuide/kidney-cancer-adult-key-statistics
- 81 http://www.cancer.org/Cancer/KidneyCancer/DetailedGuide/kidney-cancer-adultkey-statistics
- 82 http://www.cdc.gov/Features/dsCancerAnnualReport/
- 83 http://www.cancer.org/Cancer/KidneyCan cer/DetailedGuide/kidney-cancer-adultkey-statistics



The Connection between Kidney Cancer and the Environment

- Research is needed to understand better the connection between the environment and kidney cancer. However, the kidney's main function of removing waste from our blood puts it at higher risk of the effects of harmful substances in our body. This includes environmental contaminants we come into contact with during our lifetimes.
- Studies have shown that some people exposed to trichloroethylene or arsenic, through contaminated drinking water for example, may be at an increased risk for kidney cancer.⁸⁴

What We Are Learning from the Environmental Public Health Tracking Network

- The Tracking Network is making cancer incidence data easier to access and use. Although
 cancer incidence data are available on several websites, integrating the information with
 other health outcome data or environmental data is difficult. The Tracking Network can
 add to existing public health surveillance of cancer by examining potential ecological
 relationships with environmental exposures.⁸⁵
- The Tracking Network can tell us the average number of kidney cancer cases and the ageadjusted rate for a specific year and a 5-year time period. These data are available from 2001 to 2008. It can also provide additional demographics such as gender and ethnicity.⁸⁶
- In Wisconsin, agriculture accounts for more than 40 percent of the economy. Health officials in Wisconsin wanted to characterize more accurately the impact of agricultural pesticide use on drinking water contamination and related health outcomes.⁸⁷
 - The Wisconsin Tracking Program worked with the state agricultural agency to develop
 a database that geographically categorizes areas of high, medium, or low pesticide use.
 The Wisconsin Tracking Program's work significantly advances understanding of the
 potential for pesticide exposure via drinking water across the state.
 - o It can be used to explore associations between pesticides and adverse health effects such as cancer, thus enhancing the public health utility of regulatory data. The tool serves as a model that can be replicated by others seeking to characterize health risks related to pesticide use. ■
- 84 http://ephtracking.cdc.gov/showCancerKidneyRenalEnv.action
- 85 http://ephtracking.cdc.gov/showCancer-CollectingData.action
- 86 http://ephtracking.cdc.gov/QueryPanel/ EPHTNQuery/EPHTQuery.html?c=CR&i=-1&m=-1
- 87 http://www.cdc.gov/nceh/tracking/success/wisconsin.htm#pesticide

LUNG CANCER

About Lung Cancer

- Lung cancer forms in the tissue of the lung, usually in the cells lining the air passages. Cigarette smoking is the single most crucial risk factor for, and the leading cause of, lung cancer. Exposure to radon is the second leading cause of lung cancer.⁸⁸
- Smoking—the only risk factor a person can control—is the most common cause of lung cancer. Even for nonsmokers, exposure to secondhand cigarette smoke increases the risk for lung cancer. According to the 2006 Surgeon General's Report, the evidence suggests that secondhand smoke exposure can cause lung cancer in lifetime nonsmokers, regardless of where the exposure occurs (home, work, restaurants, etc.).⁸⁹
- A history of certain lung diseases also increases the risk for lung cancer. Diets low in fruits and vegetables might increase the risk of lung cancer in persons who smoke.⁹⁰
- Environmental tobacco smoke is a recognized causal factor for lung cancer, and air pollution may increase lung cancer risk slightly. The impact of outdoor air pollution on lung cancer needs further study.⁹¹

Lung Cancer in the United States

- Lung cancer is the leading cause of cancer deaths in the United States⁹², accounting for about 28 percent of all cancer deaths⁹³.
- Each year, more people die of lung cancer than of colon, breast, and prostate cancers combined.⁹⁴
- Overall, the chance that a woman will develop lung cancer is about 1 in 16. These numbers include both smokers and non-smokers. For smokers the risk is much higher, while for nonsmokers the risk is lower.⁹⁵
- In 2008 (the most recent year numbers are available) 96:
 - 208,493 people in the United States were diagnosed with lung cancer, including 111,886 men and 96,607 women
 - o 158,592 people in the United States died from lung cancer, including 88,541 men and 70,051 women
- Lung cancer mainly occurs in older people. About 2 out of 3 people diagnosed with lung cancer are 65 or older; fewer than 2 percent of all cases are found in people younger than 45. The average age at the time of diagnosis is about 71.97
- 88 http://ephtracking.cdc.gov/showCancerLcEnv.action
- 89 http://ephtracking.cdc.gov/showCancerLcEnv.action
- 90 http://ephtracking.cdc.gov/showCancerLcEnv.action 91 http://ephtracking.cdc.gov/showCancerL-
- cEnv.action
- 92 http://ephtracking.cdc.gov/showCancerLcEnv.action
- 93 http://www.cancer.org/Cancer/LungCancer-Non-SmallCell/DetailedGuide/nonsmall-cell-lung-cancer-key-statistics
- 94 http://www.cancer.org/Cancer/LungCancer-Non-SmallCell/DetailedGuide/nonsmall-cell-lung-cancer-key-statistics 95 http://www.cancer.org/Cancer/LungCan-
- cer-Non-SmallCell/DetailedGuide/nonsmall-cell-lung-cancer-key-statistics
- 96 http://www.cdc.gov/cancer/lung/statistics/
- 97 http://www.cancer.org/Cancer/LungCancer-Non-SmallCell/DetailedGuide/nonsmall-cell-lung-cancer-key-statistics

The Connection Between Lung Cancer and the Environment

- Studies also indicate that exposure to certain chemicals, such as arsenic, chromium, and silica; substances used or produced in foundries; and substances produced by processing coal may increase the risk for lung cancer, especially among smokers.⁹⁸
- Another risk for lung cancer is exposure to radon gas. Radon can be found throughout the
 United States. It can get into homes, offices, and schools and cause high indoor radon levels.
 The greatest exposure likely occurs in homes, the place where people tend to spend the
 most time.⁹⁹
- Occupational substances categorized by the International Agency for Research on Cancer as known lung cancer causing agent include¹⁰⁰:
 - Arsenic
 - Asbestos
 - o Bis(chloromethlyl) ether
 - Chromium
 - Nickel
 - o Polycyclic aromatic compounds
 - Radon
 - o Vinyl chloride

What We Are Learning from the Environmental Public Health Tracking Network

- The Tracking Network is making cancer incidence data easier to access and use. Although
 cancer incidence data are available on several websites, integrating the information with
 other health outcome data or environmental data is difficult. The Tracking Network can
 add to existing public health surveillance of cancer by examining potential ecological
 relationships with environmental exposures.¹⁰¹
- The Tracking Network can tell us the average number of lung cancer cases and the ageadjusted rate for a specific year and a 5-year time period. These data are available from 2001 to 2008. It can also provide additional demographics such as gender and ethnicity.¹⁰²
- 98 http://ephtracking.cdc.gov/showCancerL-
- 99 http://ephtracking.cdc.gov/showCancerLcEnv.action
- 00 http://ephtracking.cdc.gov/showCancerLcEnv.action
- 101 http://ephtracking.cdc.gov/showCancer-CollectingData.action
- 102 http://ephtracking.cdc.gov/QueryPanel/ EPHTNQuery/EPHTQuery.html?c=CR&i=-1&m=-1



Women's Health and the Environment:

The Facts

- New Hampshire's Hampshire's environment creates more radon, a natural gas that has no color or smell, than most states. As a result, more people are exposed. Radon causes more than 100 lung cancer deaths in New Hampshire each year. Testing for radon is cheap and could help stop these deaths. Still, more than 250,000 homes in high radon risk areas have not been tested.¹⁰³
 - o The New Hampshire Tracking Network worked with the New Hampshire Department of Environmental Services Radon Program to create a radon testing media campaign. The campaign ran in January for Radon Awareness Month. An issue brief was posted on the New Hampshire Tracking Network website that described the link between radon risk and radon testing behavior. The New Hampshire Department of Environmental Services also sent out a news release to offer free radon test kits to the community.
 - o The New Hampshire Department of Environmental Services gave out thousands of free radon test kits. The New Hampshire Environmental Public Health Tracking Program responded to requests about how to reduce radon exposure. The Tracking Program continues to hold radon awareness events. Plus, the Tracking Program now uses its Environmental Health Data Integration Network to track and check for reserach trends in lung cancer cases. ■

103 http://www.cdc.gov/nceh/tracking/success/newhampshire.htm#reducing

MELANOMA

About Melanoma

- Melanoma is a type of cancer which happens in skin cells that produce the pigment called melanin. It is the most dangerous but least common type of skin cancer. If this type of skin cancer is found early, it can be cured. However, melanoma can spread through the body much more quickly than other types of skin cancers and can cause death.¹⁰⁴
- Most melanomas are caused by exposure to ultraviolet (UV) radiation from the sun. Everyone is exposed to UV radiation from the sun. However, a growing number of people are being overexposed to sun rays and other sources of artificial UV radiation used in industry and other settings such as indoor tanning (using a tanning bed, booth, or sunlamp). When UV rays reach the skin's inner layer, the skin makes more melanin, the pigment that colors the skin. It moves toward the outer layers of the skin which causes a tan. A tan does not indicate good health. A tan is a response to injury, because skin cells signal that they have been hurt by UV rays by producing more pigment.¹⁰⁵
- People burn or tan depending on 106:
 - o Their skin type
 - o The time of year
 - o How long they are exposed to UV rays
- People with certain risk factors are more likely than others to develop melanoma, such as¹⁰⁷:
 - o A lighter natural skin color
 - o Family history of skin cancer
 - o A personal history of skin cancer
 - o Exposure to the sun through work and play
 - o A history of sunburns early in life
 - o A history of indoor tanning
 - o Skin that burns, freckles, reddens easily, or becomes painful in the sun
 - o Blue or green eyes
 - o Blond or red hair
 - o Certain types and a large number of moles

104 http://ephtracking.cdc.gov/showCancer-MelanomaEnv.action

105 http://ephtracking.cdc.gov/showCancer-MelanomaEnv.action

06 http://ephtracking.cdc.gov/showCancer-MelanomaEnv.action

107 http://ephtracking.cdc.gov/showCancer-MelanomaEnv.action

Women's Health and the Environment:

The Facts

- Protecting yourself from UV radiation is important all year round, not just during the summer. UV rays from the sun can reach you on cloudy and hazy days, as well as bright and sunny days. UV rays also reflect off of surfaces like water, cement, sand, and snow.
 Indoor tanning also exposes people to UV radiation. You may be able to reduce your risk of melanoma by following these steps¹⁰⁸:
 - o Seek shade, especially during midday hours
 - Wear clothing to protect exposed skin
 - o Wear a hat with a wide brim to shade the face, head, ears, and neck
 - Wear sunglasses that wrap around and block as close to 100 percent of both UVA and UVB rays as possible
 - Use sunscreen with sun protective factor (SPF) of 15 or higher, and both UVA and UVB protection
 - Avoid indoor tanning

Melanoma in the United States

- The American Cancer Society's most recent estimates for melanoma in the United States are for 2012¹⁰⁹:
 - o About 76,250 new melanomas will be diagnosed (about 44,250 in men and 32,000 in women). Incidence rates for melanoma have been rising for at least 30 years.
 - About 9,180 people are expected to die of melanoma (about 6,060 men and 3,120 women). From 2004 to 2008, the death rate in whites has been dropping in those younger than 50, but has been stable in women or rising in men older than 50.
- Deaths caused by melanoma accounted for \$3.5 billion in lost productivity each year. 110
- A person who died of melanoma between 2000 and 2006 died 20 years prematurely, compared to 17 years from other cancers.¹¹¹
- Melanoma incidence was higher among females than males, increased with age, and
 was higher in non-Hispanic whites than Hispanic whites, blacks, American Indians/Alaska
 Natives, and Asians/Pacific Islanders.¹¹²
- Melanoma rates were higher among white, Hispanic females aged 50 and younger, and Asian/Pacific Islander females aged 40 and younger, compared to their male counterparts. This study also found that Hispanics, American Indians/Alaska Natives, and Asians were diagnosed with melanoma at younger ages than whites and blacks.¹¹³
- Unlike many other common cancers, melanoma has a wide age distribution. It occurs in younger as well as older people. Rates continue to increase with age and are highest among those in their 80s, but melanoma is not uncommon even among those younger than 30. In fact, it is one of the more common cancers in young adults.¹¹⁴
 - next page

- 108 http://ephtracking.cdc.gov/showCancer-MelanomaEnv.action
- 109 http://www.cancer.org/Cancer/SkinCancer-Melanoma/DetailedGuide/melanomaskin-cancer-key-statistics
- 110 http://www.cdc.gov/cancer/skin/what_cdc_is_doing/melanoma_supplement.htm
- 111 http://www.cdc.gov/cancer/skin/what_ cdc_is_doing/melanoma_supplement. htm
- 112 http://www.cdc.gov/cancer/skin/what_ cdc_is_doing/melanoma_supplement. htm
- 113 http://www.cdc.gov/cancer/skin/what_ cdc_is_doing/melanoma_supplement. htm
- 114 http://www.cancer.org/Cancer/SkinCancer-Melanoma/DetailedGuide/melanoma skin-cancer-key-statistics



The Connection Between Melanoma and the Environment

• Between 65 and 90 percent of melanomas are caused by exposure to UV radiation from sunlight. Small amounts of UV radiation are good for people and needed for the body to produce vitamin D. But, too much exposure to the sun's rays can cause skin damage such as sunburn, wrinkles, and skin cancers.¹¹⁵

What We are Learning from the Environmental Public Health Tracking Network

- The Tracking Network is making cancer incidence data easier to access and use. While
 cancer incidence data are available on several websites, integrating the information with
 other health outcome data or environmental data is difficult. The Tracking Network can
 add to existing public health surveillance of cancer by examining potential ecological
 relationships with environmental exposures.¹¹⁶
- The Tracking Network can tell us the average number of kidney cancer cases and the ageadjusted rate for a specific year and a 5-year time period. These data are available from 2001 to 2008. It can also provide additional demographics such as gender and ethnicity.¹¹⁷
- In New Hampshire, the rates of melanoma have gone up and appear to be higher than the national rate. Many New Hampshire public health officials are concerned about the growing number of melanoma cases and asked the NH Tracking Program for a review of the data to see if it was correct. They also wanted to identify people who are most at risk.¹¹⁸
 - The New Hampshire Tracking Network staff worked with the New Hampshire Cancer Registry to review state and national melanoma data. The review found melanoma cases were underreported in the past. The use of incorrect data may have caused the melanoma rates to seem higher. Researchers did find that young women in New Hampshire have a 38 percent higher rate of melanoma than other groups nationwide.
 - o The New Hampshire Tracking Network published the findings in an issue brief. Public health education meetings about the rise in melanoma cases were also held with state health officers and other interested groups. The New Hampshire Tracking Network promoted melanoma awareness through the news media, emphasizing UV exposure reduction, especially for at-risk populations such as young women and elderly men. ■

¹¹⁶ http://ephtracking.cdc.gov/showCancer-CollectingData.action

¹¹⁷ http://ephtracking.cdc.gov/QueryPanel/ EPHTNQuery/EPHTQuery.html?c=CR&i=-18 m = 1

¹¹⁸ http://www.cdc.gov/nceh/tracking/success/newhampshire.htm#reducing

THYROID CANCER

About Thyroid Cancer

- Thyroid cancer forms in the thyroid gland. The thyroid is an organ at the base of the throat that makes hormones that help control heart rate, blood pressure, body temperature, and weight. Four main types of thyroid cancer are papillary, follicular, medullary, and anaplastic thyroid cancer.¹¹⁹
- Although a person with thyroid cancer may have a risk factor, the degree to which that risk factor contributes to the cancer may be difficult to determine. A few risk factors that increase the likelihood to develop thyroid cancer have been established. These include 120:
 - o Gender and age
 - For undetermined reasons, thyroid cancers occur about 3 times more often in women.
 - Thyroid cancers can occur at any age but most cases occur between the ages of 20 and 55 years.
 - o Diet low in iodine
 - Some types of thyroid cancers are more common in areas of the world where diets are low in iodine.
 - In the United States, dietary iodine intake is sufficient because iodine is added to table salt and foods.
 - o Radiation
 - Exposure to high levels of radiation during childhood has been proven to increase the risk for thyroid cancer. Sources of exposure include certain medical treatments and radiation fallout from power plant accidents or nuclear weapons.
 - X-ray treatments prescribed for conditions like childhood acne or ringworm of the scalp from the 1920s to the 1950s increased the risk for thyroid cancer.
 - A history of head or neck radiation treatments in childhood increases the risk for thyroid cancer.
 - Radiation therapy in childhood for some cancers such as Hodgkin's disease also increases risk.
 - Several studies suggested an increased risk of thyroid cancer in children because of exposure to radioactive iodine (I-131) in fallout from nuclear weapons or power plant accidents such as the Chernobyl accident. Some radioactive fallout occurred over certain regions of the United States after nuclear weapons testing in western states during the 1950s. This exposure was significantly lower than that measured around Chernobyl. At such low exposures, a higher risk of thyroid cancer has not been proven.

119 http://www.cancer.gov/cancertopics/ types/thyroid

¹²⁰ http://ephtracking.cdc.gov/showCancer-ThyroidEnv.action

- Hereditary conditions
 - Medullary thyroid cancer (MTC): About 1 of 5 MTCs is caused by an inherited abnormal gene.
 - Other thyroid cancers: Higher rates of the disease occur among persons with uncommon genetic conditions such as Gardner syndrome, Cowden disease, and familial adenomatous polyposis (FAP).
 - Papillary and follicular thyroid cancers: These cancers seem to run in some families
 without a known inherited syndrome. This trend may account for about 5 percent of
 all thyroid cancers. The genetic basis for these cancers is undecided.
- Most people with thyroid cancer have no known risk factors. This makes it hard to share
 prevention tips for thyroid cancer. Because of the availability of genetic blood tests, most
 cases of medullary thyroid cancer (MTC) that happen in families can be either prevented or
 treated early. If the disease is diagnosed, the patient's family members can be tested also.
 If a family history of MTC exists, a doctor who is familiar with the latest advances in genetic
 counseling and genetic testing for this disease should be consulted.¹²¹

Thyroid Cancer in the United States

- The National Cancer Institute estimates 56,460 new cases and 1,780 deaths from thyroid cancer in the United States in 2012.¹²²
- Thyroid cancer is much more likely to occur in women and people between the ages of 20 and 55.¹²³ Thyroid cancer is commonly diagnosed at a younger age than most other adult cancers; 80 percent of newly diagnosed thyroid cancer patients are under 65 years of age.¹²⁴
- Thyroid cancer has a lower fatality rate than most cancers. Since 1973, a 2.4-fold increase in the incidence of this disease has occurred. This is likely because of better detection methods rather than an increase in occurrence. 125

The Connection Thyroid Cancer

- The risk for thyroid cancer related to external ionizing radiation exposure has been wellestablished. No other environmental chemicals or physical agents have been associated with this cancer.¹²⁶
- 121 http://ephtracking.cdc.gov/showCancer-ThyroidEnv.action
- 122 http://www.cancer.gov/cancertopics/ types/thyroid
- 123 http://ephtracking.cdc.gov/showCancer-ThyroidEnv.action
- 124 http://www.cancer.org/Cancer/Thyroid-Cancer/DetailedGuide/thyroid-cancer-keystatistics
- 125 http://ephtracking.cdc.gov/showCancer-ThyroidEnv.action
- 126 http://ephtracking.cdc.gov/showCancer ThyroidEnv.action



What We Are Learning from the Environmental Public Health Tracking Network

- The Tracking Network is making cancer incidence data easier to access and use. While
 cancer incidence data are available on several websites, integrating the information with
 other health outcome data or environmental data is difficult. The Tracking Network can
 add to existing public health surveillance of cancer by examining potential ecological
 relationships with environmental exposures.¹²⁷
- The Tracking Network can tell us the average number of thyroid cancer cases and the ageadjusted rate for a specific year and a 5-year time period. These data are available from 2001 to 2008. It can also provide additional demographics such as gender and ethnicity.¹²⁸
- In Utah, a cancer cluster disease specialist (epidemiologist) with Utah's Tracking Program
 received an inquiry from a concerned resident about a possible cancer cluster in her
 neighborhood. The resident requested a study of the rate of female thyroid cancer in the
 past 10 years in Tooele County. She named the Energy Solutions landfill as a possible source
 of environmental radiation exposure.¹²⁹
 - o The cancer cluster epidemiologist compared rates of thyroid cancer in the area to statewide rates, over five year periods. The epidemiologist used the secure Utah Tracking Network's data as well as a mapping and analysis tool available through the Tracking Program. The data were analyzed and there was not enough evidence to prove that a thyroid cancer cluster exists among women ages 20-54 in Wasatch, Tooele, and Box Elder counties. Utah's Tracking Network helped the epidemiologist provide a much quicker response to citizens' concerns than was previously possible. ■

¹²⁷ http://ephtracking.cdc.gov/showCancer-CollectingData.action

¹²⁸ http://ephtracking.cdc.gov/QueryPanel/ EPHTNQuery/EPHTQuery.html?c=CR&i=-1&m=-1

¹²⁹ http://www.cdc.gov/nceh/tracking/success/utah.htm#concern



Women, Pregnancies, and the Environment

Matte Article



Pesticides have been linked to fetal deaths. Air pollution has been tied to an increase in the rate of deaths shortly after a baby is born.

Reproductive and Birth Issues Related to the Environment

About one out of every 10 women (6.1 million) in the United States, from 15-44 years old, have a hard time getting pregnant or staying pregnant. And once they do, about one in eight of those new babies is born early. The Centers for Disease Control and Prevention (CDC) has found some of these issues can be linked to things in the environment that most people encounter without even knowing it.

The vulnerability of pregnant women and babies puts them at greater risk from environmental factors such as air quality, lead, solvents, and pesticides. This makes it even more important for women to avoid contact as much as possible.

Risk factors for poor reproductive health usually are hard to identify and often go unnoticed, making them even more dangerous. Air pollution is often too small to taste, smell, or see, but is still very dangerous. It has been linked to an increase in the rate of deaths shortly after a baby is born, from age 28 days through the first year of life. Pesticides have been associated with fetal death and also contribute to the 6.61 infant deaths per 1,000 that happen every year.

CDC's National Environmental Public Health Tracking Network (Tracking Network) is a tool that can help us understand the relationships between the environment and health issues, such as reproductive health, and help to improve health. Health agencies across the country collect and share data that typically would be kept separately. Bringing it all together helps us to discover the connections between our health and the environment.

The Tracking Network also is helping us map which environmental factors contribute to problems such as infertility, preterm birth, and infant mortality. This information can help public health officials deliver the right help for issues in these communities in the form of funding, policy changes, and public awareness. The Tracking Network website also provides tips that individuals can use to help lower their risk of coming in contact with these pollutants, such as limiting outside activities when the air quality is unhealthy.

Protect yourself:

- Know when air pollution may be high in your area and reduce the amount of time you spend outside. Use the Environmental Protection Agency's Air Quality Index to get accurate information.
- Be aware of your surroundings and limit your contact with solvents, chemicals, lead, and pesticides.
- Take advantage of CDC's tools for a healthy pregnancy and baby.

You can learn more about this important topic at www.cdc.gov/ephtracking.



Women, Heart Attacks, and the Environment

Matte Article



People who breathe very small bits of air pollution (fine particle pollution) either short term or long term have a greater risk of heart disease.

Pollution Linked to Leading Cause of Death in Women: Simple Ways to Monitor Your Risk and Take Charge of Your Health

Every 90 seconds in the United States a woman suffers a heart attack. This shocking rate has made heart disease the leading cause of death among women. We've known that heart health is related to poor diet and lack of exercise, but heart health can also be affected by air pollution.

Breathing very small bits of air pollution increases your risk of heart problems. Air pollution created by burning fossil fuels is too small to see, smell, or taste. It is small enough to go deep into lungs, where it can affect the heart, lungs, and blood vessels.

A resource from the Centers for Disease Control and Prevention (CDC) is helping us understand this connection between heart health and the air we breathe. The National Environmental Public Health Tracking Network (Tracking Network) is a tool that can help us learn how solving one problem like improving air quality, can help prevent heart attacks. For example, a tool available on the Tracking Network shows how reducing some air pollution by 10 percent could prevent more than 13,000 deaths every year across the nation.

The Tracking Network makes it easy to see information and recognize things about certain communities that may cause heart problems related to air pollution. These factors include a high level of poverty, more people without insurance, and higher exposure to auto exhaust due to more cars on the road. These risk factors are linked to more heart and lung problems, hospital visits, and deaths in areas with high amounts of air pollution.

This information can help public health officials give communities the help they most need, such as policies that keep the air clean. In addition, here are six easy tips you can use to help protect yourself and the women you love from the effects of air pollution:

- 1. Know what your risk for heart disease is and how sensitive you are to air pollution.
- 2. Know when air pollution may be high in your area and reduce your time spent outside. Use the Air Quality Index to get information.
- 3. Plan activities when and where pollution levels are lower.
- 4. Listen to your body.
- 5. See your health care provider when you need to.
- 6. Keep your medication with you.

You can learn more about this important topic at www.cdc.gov/ephtracking.



Matte Article



Contaminated drinking water and chemicals have been linked to many kinds of cancer in women.

Cancer's Connection to Everyday Contaminants is Now Tracked to Lower Risks

Cancer is second only to heart disease as the leading cause of death in the United States. Every day doctors and patients are fighting more than 100 types of cancer.

A tool from the Centers for Disease Control and Prevention is now helping us understand the connection between cancer and our environment. The National Environmental Public Health Tracking Network (Tracking Network) makes it easy to see information about our environment and local cancer rates that help us discover certain community qualities that may increase cancer risk. For example, the Tracking Network collects data on several cancers affecting women – breast, kidney, lung, thyroid, and melanoma.

The Tracking Network houses information together that used to be kept separately, helping scientists, doctors, and public health officials understand more about the environmental factors that might put us at risk for cancer and then create solutions. For example, the following possible environmental issues are now being tracked:

- Exposure to chemicals such as poly aromatic hydrocarbons, benzene, and organic solvents in breast cancer patients.
- Trichloroethylene or arsenic exposure through contaminated drinking water in kidney cancer patients.
- Chemicals believed to cause lung cancer that people come in contact with at work.

The hope is that as these risk factors are understood better, scientists and doctors not only will learn to treat these diseases, but will be prepared to prevent them.

You can learn more about this important topic at www.cdc.gov/ephtracking. ■



Social Media Examples



These posts/tweets were written to help your organization "talk" with your many audiences.

This document contains example topics for social media

channels such as Facebook and Twitter. These posts/tweets were written to help your organization "talk" with your many audiences. Specific examples are provided that can be used to help communicate the value of the Tracking Network to health departments, decision makers and other interested parties. Each post/tweet is organized under a goal of the Tracking Network; they can be used as they have been written, or, they can be customized for your own purposes with language and information that will best resonates with your constituents.

Tips for Using Social Media:

- Social media channels are powerful tools that can help you communicate with and engage your audience. If you do not already have social media tools in place, set up a Facebook page and Twitter account here: www.facebook.com; http://twitter.com
- CDC's Tracking Network has an active Facebook page and Twitter account. "Friends" can follow us and share relevant and interesting posts.
 - o Facebook: like CDC National Environmental Public Health Tracking Network
 - Twitter: follow @CDC_EPHTracking
- Watch for general news articles about public health and the environment and share
 these articles on your Facebook wall and your Twitter account. For example, during
 fall and winter months when the risk of CO poisoning is higher, share or retweet news
 stories and add your own comments and tweets to the discussion. Use the provided
 tool kit materials, such as the fact sheet and key messages, to create new posts and
 tweets that underscore how effective the Tracking Network is and has been.
- Tips for Facebook:
 - o When mentioning the Tracking Network, use @CDC National Environmental Public Health Tracking Network
- Tips for Twitter:
 - Hashtags make your tweets searchable and allow them to become part of the broader conversation on a given topic. When posting CO poisoning-related material, for example, use #COpoisoning. When mentioning the Tracking Network, use #CDCEPHT.
 - Help build the Tracking Network's Twitter following by including @CDC_
 EPHTracking in your #FF (Follow Friday) tweets. Follow Friday (#FF) is a hashtag



used to help Twitter users find other compatible users through their friends' recommendations

 Here's an example of what a Follow Friday tweet looks like: #FF #Medical #Health @DMC_Heals @HenryFordNews @ClevelandClinic @KHNews @kevinmd @ DoctorsLounge @GoHealthDotCom @DrDavidHanscom @meyouhealth

Reproductive and Birth Outcomes

Goal: Educate about the connection between women's reproductive health and the environment.

environment.	
Facebook	Twitter
Risk of prematurity or preterm delivery has been related to exposures to air pollution, lead, and some solvents during pregnancy. CDC's Tracking Network helps public health professionals focus resources to protect those most at-risk: www.cdc.gov/ephtracking.	Fertility risks are related to air pollution exposure. @CDC_ EPHTracking Network helps focus resources to protect those at risk: http://bit.ly/eZiMpa
May is Women's Health Month. CDC's Tracking Network equips public health officials to battle a variety of women's health issues in your community: www.cdc. gov/ephtracking.	May is #womenshealthmonth. @ CDC_EPHTracking Network helps pub health officials battle diseases affecting women: http://bit.ly/eZiMpa
Outdoor air pollution is one major factor in the connection between environmental risk and infant death. Learn more about how the environment is linked to reproductive health: www.cdc.gov/ephtracking.	Outdoor air pollution is a factor in the connection between #enviro risk and infant death. Learn more: http://bit.ly/eZiMpa
About 10 percent of all fertility problems are unknown, and environmental contaminants may be one of the contributors. Use CDC's Tracking Network to find out more: www.cdc.gov/ephtracking.	About 10% of all fertility problems are unknown environmental contaminants may be one of the players: http://bit.ly/eZiMpa



Social Media Examples

Goal: Raise awareness about the connection between women's reproductive health and the environment via the Tracking Network

Facebook	Twitter
CDC's Tracking Network uses information from many health resources to help us understand the connection between the environment and premature births. Learn more at CDC's Tracking Network: www.cdc.gov/ephtracking.	@CDC_EPHTracking Network provides clues to fertility changes that may influenced by #enviro risk factors: http://bit.ly/eZiMpa
Did you know that there's a connection between reproductive health and the environment? Check out other connections between health and the environment in your area: www.cdc.gov/ephtracking.	Did you know there's a connection between reproductive health & the environment? Check out #health & #enviro ties: http://bit.ly/eZiMpa
CDC's Tracking Network can help us understand the geographic distribution and trends in fertility and can provide descriptive clues to changes that may be influenced by environmental risk factors. ww.cdc. gov/ephtracking.	@CDC_EPH Tracking Network has data on a variety of #enviro factors that can impact a woman's #health. Learn more: http://bit.ly/eZiMpa
CDC's Tracking Network has data on a variety of environmental factors that can impact a woman's health. Discover how it can aid efforts for women's reproductive health at www.cdc.gov/ephtracking.	



Social Media Examples

Goal: Demonstrate the Tracking Network's value as a resource and attract people to the website

Facebook	Twitter
Public hhealth professionals: CDC's Tracking Network has information on preterm births; infant, neonatal, and postnatal deaths; and trends in fertility related to reproductive and birth outcomes. Access this tool to help target your outreach: www.cdc.gov/ephtracking.	#PublicHealth pros, use @CDC_ EPHTracking Network to find #enviro health info to help make resource decisions: http://bit.ly/eZiMpa
CDC's Tracking Network is making cancer incidence data easier to access and use. Learn more at www. cdc.gov/ephtracking.	@CDC_EPHTracking Network is making #fertility and #reproductive data easier to access & use. Learn more http://bit.ly/eZiMpa
You work to protect people and save lives. Use the Tracking Network to access environmental health data that helps you do just that! www.cdc.gov/ephtracking.	#Health and #enviro data can protect people and save lives! Check out @ CDC_EPHTracking Network: http:// bit.ly/eZiMpa
(INSERT YOUR ORGANIZATION NAME) is using the CDC's Tracking Network to understand how public health and the environment are connected. What environmental health issues most concern you?	We're using the @CDC_EPHTracking Network to understand how #publichealth and the #environment are connected http://bit.ly/eZiMpa



Heart Attacks

Goal: Educate about the connection between women's heart health and the environment

Facebook	Twitter
Studies have reported associations between air pollution and hospitalizations for heart attacks. See how CDC's Tracking Network makes connections between women's heart health and the environment: www.cdc.gov/ephtracking.	See how @CDC_EPHTracking Network reports connections between women's #hearthealth and the #enviro http://bit.ly/eZiMpa
Every 90 seconds in the United States a woman suffers a heart attack. Learn the environmental risks involved with women's heart health through CDC's Tracking Network: www.cdc.gov/ephtracking.	A woman suffers a heart attack every 90 sec in the US. Learn about the connection between heart health and the envir: http://bit.ly/eZiMpa
The level of environmental risk for heart attacks depend on several factors, including how much pollution is in the air, a person's exposure to air pollution, and aperson's overall health. Learn more about the connections between the environment and health at www.cdc.gov/ephtracking.	The level of environmental risk for heart attacks depends on several factors. Learn more through @CDC_EPHTracking http://bit.ly/eZiMpa
A heart attack can happen to anyone. In fact, it is the leading killer of women as well as men in the U.S. CDC's Tracking Network helps public health officials know what populations are affected by environmental risks: www.cdc.gov/ephtracking.	Heart attacks can happen to anyone. Use @CDC_EPHTracking Network & see connections between #hearthealth and pollution http://bit. ly/eZiMpa



Social Media Examples

Goal: Raise awareness about the connection between women's heart health and the environment via the Tracking Network

Facebook	Twitter
Did you know that increases in air pollution have been linked to increases in heart attacks? Visit CDC's Tracking Network to learn about other environment and health links: www.cdc.gov/ephtracking.	Did you know that increases in #airpollution have been linked to increases in #heartattacks? http://bit.ly/eZiMpa
According to the EPA, the Air Quality Index directly affects people with heart disease. Check the air quality index to find out if the air is healthy near you: www.airnow.gov.	The Air Quality Index affects people w/ #heartdisease. Check the air quality index & learn about the quality of air near you www.airnow. gov
Want to learn what environmental health issues are of most concern in your area? Use CDC's Tracking Network to find out: www.cdc.gov/ephtracking.	Learn what environmental health issues are of most concern to you areas through the @CDC_ EPHTracking Network http://bit.ly/eZiMpa



Social Media Examples



Facebook	Twitter
Public health professionals: CDC's Tracking Network has information on hospital admissions related to women and heart attacks. Access this tool to help target your outreach: www.cdc.gov/ephtracking.	#PublicHealth pros, use @CDC_ EPHTracking Network to find #enviro health info to help make resource decisions: http://bit.ly/eZiMpa
The Tracking Network is making heart attack incidence data easier to access and use. Learn more at www.cdc.gov/ephtracking.	@CDC_EPHTracking Network is making #heartattack data easier to access and use. Learn more at http://bit.ly/eZiMpa
You work to protect people and save lives. Use CDC's Tracking Network to access environmental health data that helps you do just that! www.cdc.gov/ephtracking.	#Health and #enviro data can protect people and save lives! Check out @ CDC_EPHTracking Network: http:// bit.ly/eZiMpa
(INSERT YOUR ORGANIZATION NAME) is using the CDC's Tracking Network to understand how public health and the environment are connected. What environmental health issues most concern you?	We're using the @CDC_EPHTracking Network to understand how #publichealth and the #environment are connected http://bit.ly/eZiMpa





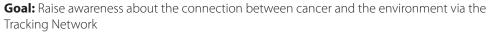
Cancer

Goal: Educate about the connection between cancer and the environment

Facebook	Twitter
Most melanomas are caused by exposure to ultraviolet light in the environment. Learn more about connections between the environment and health: www.cdc.gov/ephtracking.	UV rays cause most melanomas. Learn about connections between #enviro and #health: http://bit.ly/ eZiMpa
Studies have shown that some people exposed to trichloroethylene or arsenic through contaminated drinking water may be at an increased risk for kidney cancer. See how CDC's Tracking Network is helping to make cancer incidence data easier to use: www.cdc. gov/ephtracking.	Studies show ppl exposed to contaminated drinking water may be at risk for kidney cancer: Learn about environmental risks http://bit.ly/eZiMpa
The greatest exposure to radon gas, an environmental risk for lung cancer, occurs in the home. Learn more about these environmental risks at www.cdc.gov/ephtracking.	The most exposure to randon gas, #enviro risk for #lungcancer, occurs in the home. Learn more from @CDC_ EPHTracking http://bit.ly/eZiMpa
Exposure to high levels of radiation during childhood has been proven to increase the risk for thyroid cancer. CDC's Tracking Network helps public health officials know what populations are at-risk and where: www.cdc.gov/ephtracking.	Exposure to childhood radiation increases risk for thyroid cancer. @ CDC_EPHTracking helps identify risk populations http://bit.ly/eZiMpa



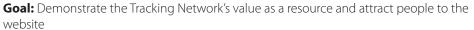
Social Media Examples



Facebook	Twitter
CDC's Tracking Network is examining potential relationships between cancer and environmental exposures. Check out the Tracking Network to learn more: www.cdc.gov/ephtracking.	@CDC_EPHTracking Network is examining potential relationships between #cancer and the #enviro. Learn more: http://bit.ly/eZiMpa
The connection between cancer and the environment is complex. Use the CDC's Tracking Network to learn more: www.cdc.gov/ephtracking.	The connection between #cancer and the #enviro is complex. Use @ CDC_EPHTracking Network to learn more: http://bit.ly/eZiMpa
Did you know that melanoma incidence is higher among women than men? Learn more about the environmental risks through the CDC's Tracking Network: www.cdc.gov/ephtracking.	Did you know melanoma incidence is higher among women than men? Learn about #enviro risks http://bit.ly/ eZiMpa



Social Media Examples



Facebook	Twitter
Public health professionals: CDC's Tracking Network is making cancer incidence data easier to access and use. Access this tool to help target your outreach: www.cdc.gov/ephtracking	#PublicHealth pros, use @CDC_ EPHTracking Network to find #enviro health info to help make resource decisions: http://bit.ly/eZiMpa
The Tracking Network is making cancer incidence data easier to access and use. Learn more at www.cdc.gov/ephtracking	@CDC_EPHTracking Network is making #cancer incidence data easier to access and use. Learn more at http://bit.ly/eZiMpa
You work to protect people and save lives. Use the Tracking Network to access environmental health data that helps you do just that! www.cdc.gov/ephtracking	#Health and #enviro data can protect people and save lives! Check out @ CDC_EPHTracking Network: http:// bit.ly/eZiMpa
(INSERT YOUR ORGANIZATION NAME) is using the CDC's Tracking Network to understand how public health and the environment are connected. What environmental health issues most concern you?	We're using the @CDC_EPHTracking Network to understand how #publichealth and the #environment are connected http://bit.ly/eZiMpa